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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,564	03/30/2004	Robert Hasbun	MP1443 130199	3689
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EXAMINER				
RAHIM, MONJUR				
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2434				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/812,564

**Applicant(s)**

HASBUN, ROBERT

**Examiner**

MONJOUR RAHIM

**Art Unit**

2434

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7, 9, 10 and 12-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9, 10 and 12-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/888)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***DETAILED ACTION***

1. This action is responsive to: an original application filed on 3/30/2004.
2. *Claims 1-7, 9-10, 12-37* are currently pending and *claims 1, 9, 18, 24, 28, and 34* are independent claims.

***Drawings***

3. The drawings filed on 3/30/2004 are accepted by the examiner.

***Response to Amendment***

4. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn. This application has been re-opened due to the new ground of rejections.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

*Claims 1-7, 9-10, 12-37* are rejected under 35 U.S.C. 103(a) as being unpatentable over Paul Beard (US patent No. 7245725), hereinafter Beard and in view of England et al. (US Patent No. 7137004), hereinafter England.

In regard to *claim 1*, Beard discloses:

- *receiving, with a first processor, data for use in an operation in a second processor, the second processor being a wireless communications processor* (Beard, col 4, lines 26-36, "a

dual processor framer may be provided in which the first processor provides asynchronous communication and the second processor ... processor framer may be implemented in hardware and/or software. Communications between processors may be interrupt driven or may be accomplished through polling. In the case of an interrupt mode of operation, an internal and/or external line may be dedicated for sending an interrupt signal for a variety of conditions”);

- *verifying, with the first processor, a credibility of the data for the second processor* (Beard, col 5, lines 53-65, “A packet of data has a header error correction (HEC) and cyclic redundancy check (CRC) assigned to certain fields. The HEC and CRC may be calculated through either hardware or software. For the sake of flexibility, software code may be implemented in the form of subroutines or standalone code. For the sake of speed, the processing may be implemented in hardware or a combination of hardware and software. A HEC/CRC initialization sequencer 30 is in charge of setting default start values for the HEC/CRC. These may be changed through user input or may be set dynamically through an internal algorithm. Another process 40 stores, modifies, and assigns to the appropriate fields of the packet the HEC and CRC”),

Beard does not explicitly teach *trusted state*; however in a relevant art England discloses a system in which an upgrade (information update) to a new trusted core(1) or another application (i.e. an applications processor) may be initiated in a trusted core(0) if the new core is trusted. The second portion reads a value stored by the first portion, a certificate, to verify a trusted state, before loading it (a secure operation) (see column 11, lines 36-52). There are computer-readable media (see column 29, lines 50-53). Since England's invention may be connected to a wireless network (see column 3, lines 19-22), the system comprises a wireless device. Measures of the trusted core for reading may be stored in one-way registers after reset (not modifiable) for accessing by other subsystems (see column 6, lines 10-28).

England discloses that the cores (rings) of the system architecture are implemented to take advantage of the different privilege levels of the one or more processors (see column 5, lines 43-46). It is unclear as to whether one skilled in the art would ascertain that England discloses that each of the cores would be mapped to different processors. If so, then these claims are anticipated; otherwise, it would be obvious for one skilled in the art to so map these processors in order to simplify the mapping of processor privilege levels to the cores.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use England's invention modify Beard so that the data can travel in a secure state and that would prevent data to be stolen.

In regard to *claim 2*, claim 1 is incorporated and Beard discloses:

- *wherein the operation comprises an information update* (Beard, col 4, lines 1-6, "The dual processor framer handles all bit-wise operations of transmitted and received data, and identifies time slots assigned to a channel or subchannel for transmission using time division multiplexing under the control of multiple processors").

In regard to *claim 3*, claim 2 is incorporated and Beard discloses:

- *setting a register containing a value using the first processor when exiting the trusted state* (Beard, col 9, lines 62-66, "The external second processor 520 may write to control registers to manage operation of the internal first processor 510. Three control registers may be used: an interface control register, an indirect data register, and an indirect address register").

In regard to *claim 4*, claim 3 is incorporated and Beard discloses:

- *further comprising reading the value using the second processor* (Beard, col 6, lines 18-21, "The packet header is encoded using 1/3 rate FEC in which the bit is repeated three times. A shortened Hamming code or 2/3 rate FEC encodes various packet").

In regard to *claim 5*, claim 3 is incorporated and Beard discloses:

- *further comprising preventing an execution of the operation if the value is not indicative of the trusted state* (Beard, col 6, lines 63-67, "A receive interrupt generator 400 informs the host that data has been received and translated and is ready for transfer. The receive data DMA controller 340 manages transfer of the translated, received data to the host.

In regard to *claim 6*:

Beard does not explicitly teach *trusted state*; however in a relevant art England discloses a system in which an upgrade (information update) to a new trusted core(1) or another

application (i.e. an applications processor) may be initiated in a trusted core(0) if the new core is trusted. The second portion reads a value stored by the first portion, a certificate, to verify a trusted state, before loading it (a secure operation) (see column 11, lines 36-52). There are computer-readable media (see column 29, lines 50-53). Since England's invention may be connected to a wireless network (see column 3, lines 19-22), the system comprises a wireless device. Measures of the trusted core for reading may be stored in one-way registers after reset (not modifiable) for accessing by other subsystems (see column 6, lines 10-28).

England discloses that the cores (rings) of the system architecture are implemented to take advantage of the different privilege levels of the one or more processors (see column 5, lines 43-46). It is unclear as to whether one skilled in the art would ascertain that England discloses that each of the cores would be mapped to different processors. If so, then these claims are anticipated; otherwise, it would be obvious for one skilled in the art to so map these processors in order to simplify the mapping of processor privilege levels to the cores.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use England's invention modify Beard so that the data can travel in a secure state and that would prevent data to be stolen.

In regard to *claim 7*, claim 2 is incorporated and Beard discloses:

*- further comprising receiving the information update via an air interface with the second processor and providing the information update to the first processor* (Beard, col 1, lines 12-14, "The present invention generally relates to the field of wireless data communications, and, particularly, to wireless communication devices which are managed using two or more processors").

As per *claims 9-11, 16, and 28*:

England discloses a system in which an upgrade (information update) to a new trusted core(1) or another application (i.e. an applications processor) may be initiated in a trusted core(0) if the new core is trusted. The second portion reads a value stored by the first portion, a certificate, to verify a trusted state, before loading it (a secure operation) (see column 11, lines 36-52). There are computer-readable media (see column 29, lines 50-53). Since England's invention may be connected to a wireless network (see column 3, lines 19-22), the system

comprises a wireless device. Measures of the trusted core for reading may be stored in one-way registers after reset (not modifiable) for accessing by other subsystems (see column 6, lines 10-28).

England discloses that the cores (rings) of the system architecture is implemented to take advantage of the different privilege levels of the one or more processors (see column 5, lines 43-46). It is unclear as to whether one skilled in the art would ascertain that England discloses that each of the cores would be mapped to different processors. If so, then these claims are anticipated; otherwise, it would be obvious for one skilled in the art to so map these processors in order to simplify the mapping of processor privilege levels to the cores.

Regarding *claims 12-14, 17, and 29, 30, 32, 33*, the judgment as to whether an upgrade is to proceed may be contingent on the state of the register.

As per *claim 31*, the operation is not performed and appropriate remediation is performed if the verification of the upgrade fails (see column 11, line 66 to column 12, line 6).

*Claims 15, 18-27, and 34-37* are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,137,004 to England et al.

Regarding *claim 15*, England does not disclose an indication being sent if the upgrade failed.

Official notice is given that it is well-known in the art to send error messages in the event of a process failure, so that other processes may take any necessary remedial action.

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of England by sending an error message in the event of failure, as is well-known in the art, so that other processes may take any necessary remedial action.

Regarding *claims 18-20, 22-26, and 34-36*, England does not specifically state that the communications processor be mapped to trusted core(0); however, since England states the importance of secure, trusted communications and leaves open the manner in which this may be implemented (see column 3, lines 34-40), it would be obvious for one of ordinary skill in the art to map the communications processor to the most secure ring (i.e. core(0)).

Regarding *claim 21*, the ability of the second portion to receive a program signal is not contingent upon the state of the application, so it can be received if the state is not valid.

Regarding *claim 27*, wireless communications devices inherently have antennas. As per *claim 37*, any new trusted application is received over the network (see column 28, lines 24-30). The trusted application is received by the currently running core, which is the second portion, before becoming instantiated in the first portion.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (see form "PTO-892 Notice of Reference Cited").

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monjour Rahim whose telephone number is (571)270-3890. The examiner can normally be reached on 5:30 AM -3:30 PM (Mo-Th).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on (571)272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair.direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (in USA or CANADA) or 571-272-1000.

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Patent Examiner  
Art Unit: 2434  
Date: 11/21/2008  
/Kambiz Zand/



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Supervisory Patent Examiner, Art Unit 2434